

South Carolina Office of Regulatory Staff

Investigation and Final Report

WS Lee Pipeline Facility

August 21, 2018



Background

On May 8, 2018, the South Carolina Office of Regulatory Staff (ORS) received a letter dated May 3, 2018, addressed to Vice Chairman of the Public Service Commission of South Carolina (PSC), Comer H. Randall. The anonymous letter expressed safety concerns regarding the recent construction of a natural gas line that feeds the WS Lee facility in Anderson, South Carolina (pipeline). Specifically, the letter stated that one of the welds of the steel pipeline had failed x-ray standards implemented by the Pipeline and Hazardous Materials Safety Administration (PHMSA) and that no records existed that the weld had been repaired.

Piedmont Natural Gas (PNG) is the owner and operator of the pipeline into the WS Lee facility. On May 9, 2018, the entire ORS Pipeline Safety staff conducted an initial inspection and interview with PNG personnel that supervise the pipeline in Greenville, South Carolina. One week later, May 16, 2018, the ORS Pipeline Safety staff, as well as additional ORS administrative personnel, conducted a formal inspection of records of the pipeline facility in question at the PNG offices in Spartanburg, South Carolina.

ORS Inspection and Fact Findings

During the initial meeting and inspection on May 9, 2018, PNG personnel were interviewed and expressed a deep concern with the allegations made in the letter to the PSC. PNG was cooperative and pledged to provide any information and records necessary to conduct a formal inspection and investigation. ORS requested all records of x-rayed welds that may have any type of defect, a 10% sample of all X-rays, all records and documentation for testing of the pipeline, and records used for calibration of all X-ray machines. ORS determined that there was no immediate threat to the integrity of the pipeline and that it was not necessary for PNG to terminate operations at that time.

The following week, ORS again met with PNG staff to review maps and records of the construction project. During this formal investigation, ORS reviewed PNG's Operations and Maintenance records (O&M), procedures manual, the pipeline construction contractor's O&M, the radiography company's O&M, test records, and the construction inspector's field records. ORS also reviewed the API 1104 standard as it pertained to PNG's construction.

The ORS investigation alleged three inconsistencies at this time:

- 1) Section 4.5 of PNG's procedures states that all bore/drilled pipe will be X-rayed by a level III tech. The procedures also state that an audit of at least 10% of all X-rays completed by a level II tech shall be reviewed by a level III tech, daily. Neither of these occurred.
- 2) Section 4.3.7 of PNG's procedures states that any defect found and repaired shall be inspected in the manner it was discovered. To date, the re-inspection has not been conducted in the manner it was discovered.
- 3) PNG did not document the repair made to the weld in question.

ORS Actions

ORS met again with PNG personnel to determine their course of action on June 6, 2018. PNG had conducted its own investigation of the pipeline construction process to determine why there was no documentation for the weld repair or audits per PNGs procedures. PNG determined that upon completion of the pipeline, two hydro tests on the pipeline were conducted and both tests were successful, and therefore, the line was safe to continue to operate and met all PHMSA requirements.

ORS was not satisfied with PNG's explanation regarding its lack of record-keeping and ORS issued a Notice of Non-Compliance on June 11, 2018 to PNG finding its system to be in non-compliance with the following:

§ 192.13(c) – Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

§ 192.709(a) – The date, location, and description of each repair made to pipe (including pipe to pipe connections) must be retained for as long as the pipe remains in service.

PNG provided a response to ORS's Notice of Non-Compliance on July 6, 2018. Regarding § 192.13(c), PNG determined that it will create a set of more robust policies and procedures by reviewing and merging all policies and procedures for both PNG and Duke Energy. PNG will also develop and implement an additional checklist to be used on all transmission pipeline projects involving horizontal directional drilling to ensure all required documentation is captured. Addressing §192.709(a), PNG maintained that the two successful hydro tests that were performed at the completion of the project revealed no defects in the pipeline and therefore no repairs were necessary.

ORS conducted a follow-up inspection and conference with PNG on July 9, 2018, to discuss PNG's action plan and response. Additionally, ORS sought advisement from PHMSA thereafter to ensure that PNGs response and proposed steps to rectify the issue complied with federal regulations and PHMSA concurred.

Conclusion

After a thorough investigation of PNG's WS Lee facility, ORS has concluded that the pipeline remains in safe working condition. ORS is satisfied with the response from PNG and the corrective actions proposed. Through this investigation, no safety concerns for the operation of this system were found and ORS closed the non-compliance on July 30, 2018.